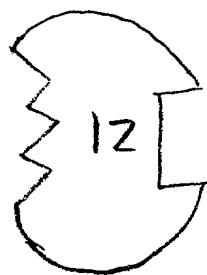
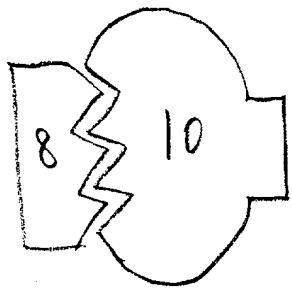
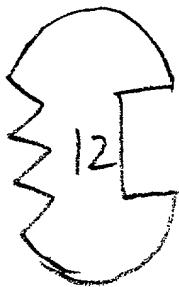
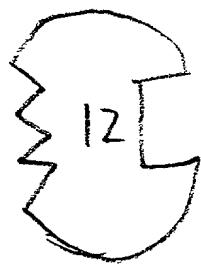
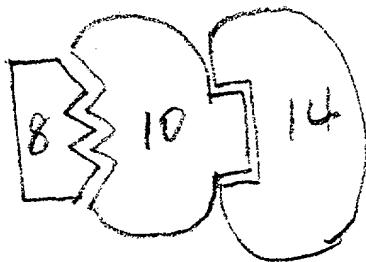
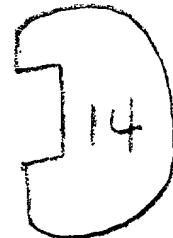
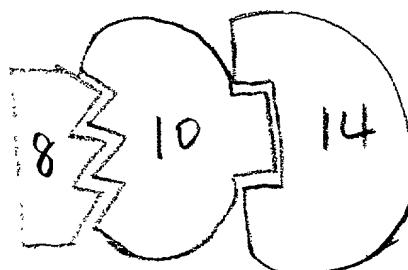
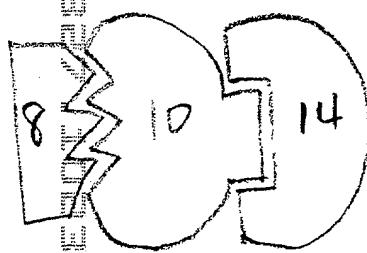


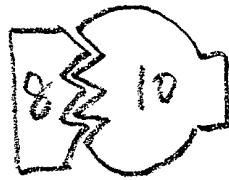
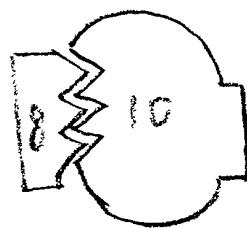
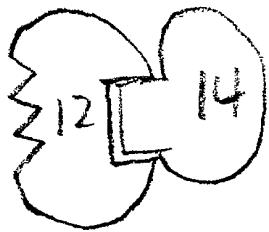
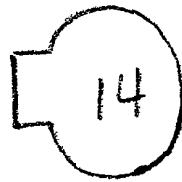
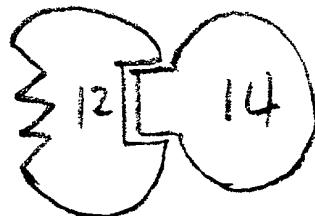
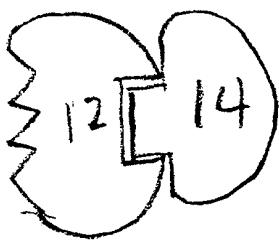
Fig 1A



1B



1C





Insertion before arm

FIGURE 2

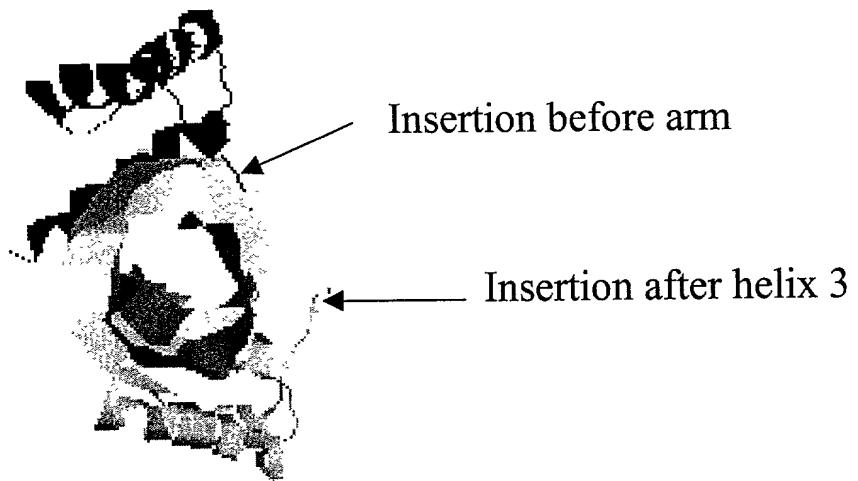


FIGURE 3

Figure 4: Crystal Structure of C-terminal domain of cI

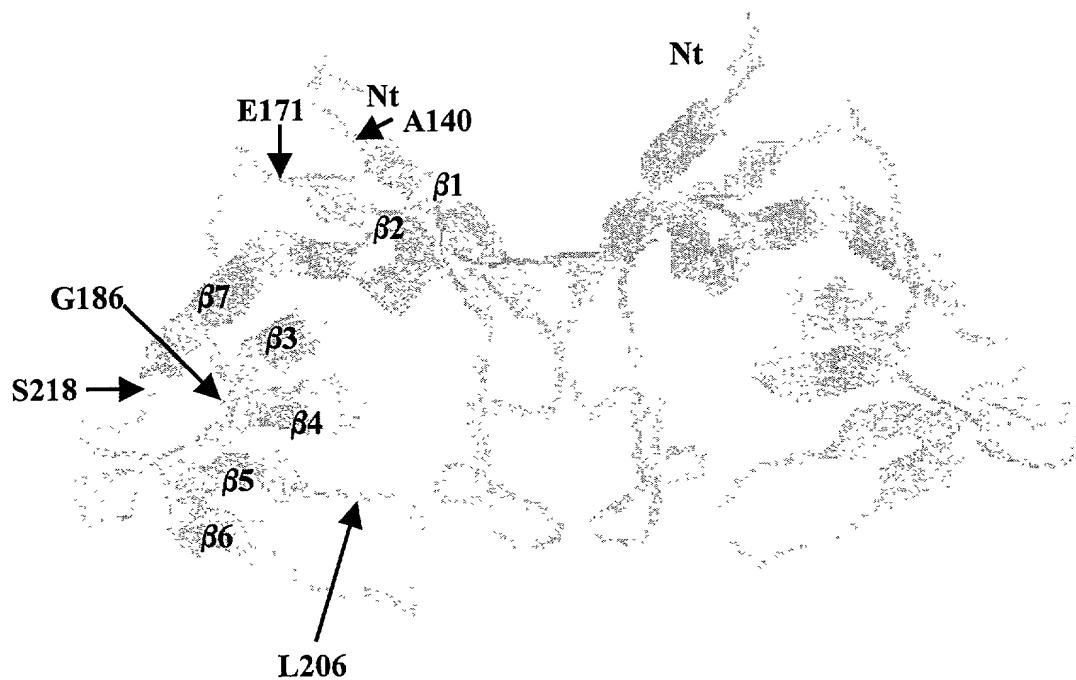
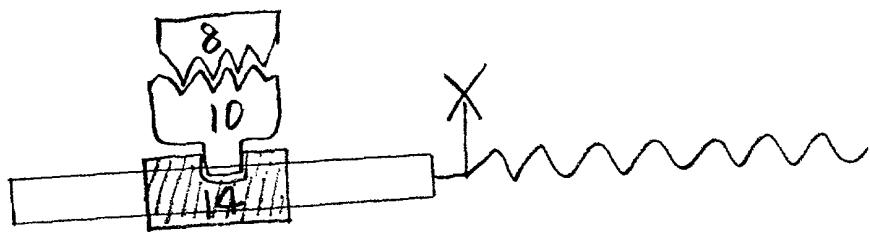
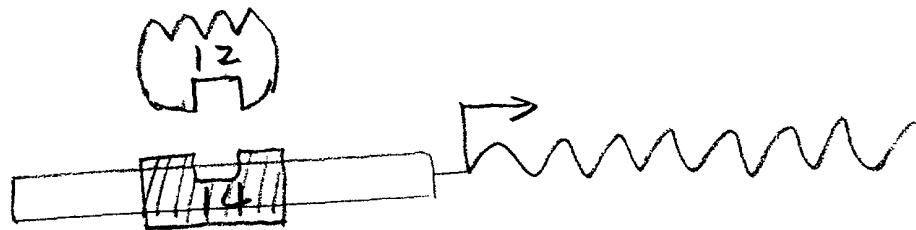


FIGURE 4

# simple binary switch



stimulus present



stimulus absent

— an active promoter

 repressor binding site

 reporter gene

FIGURE 5

# FLIP-FLOP

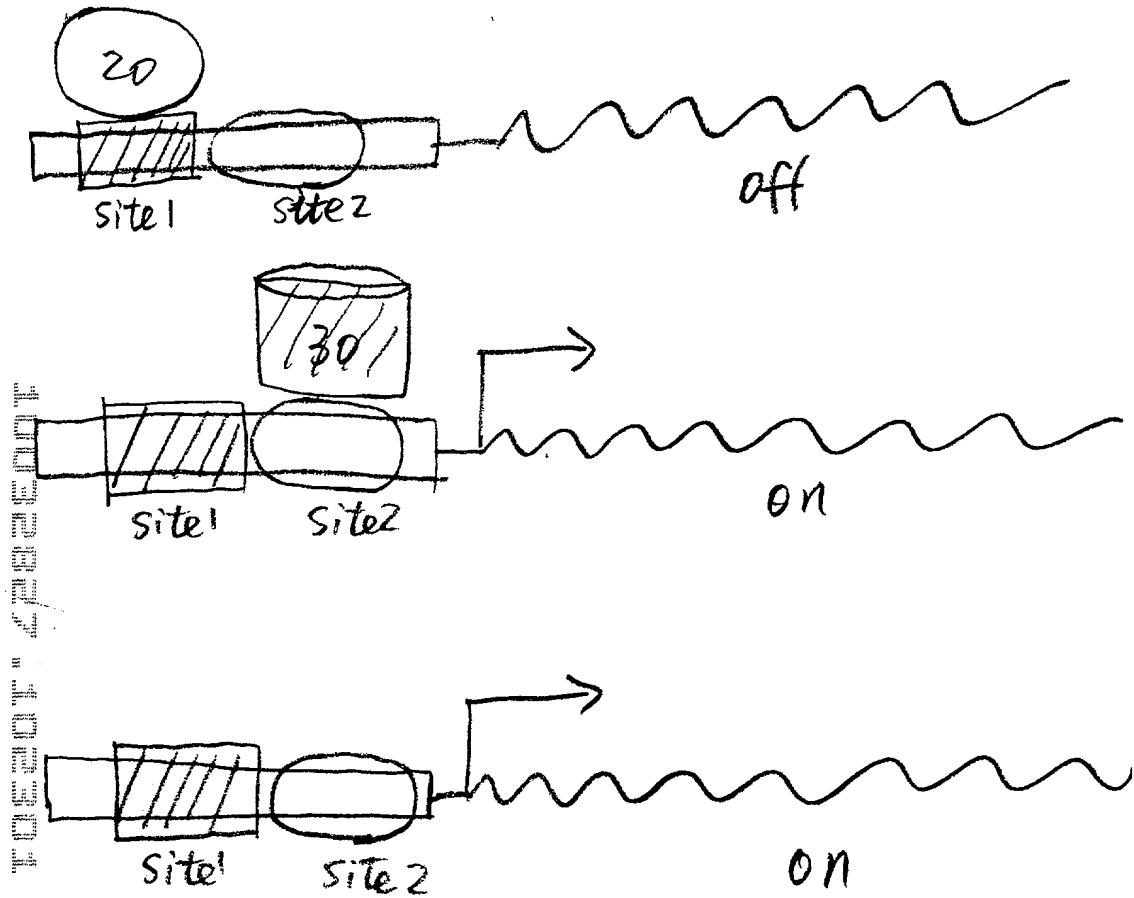
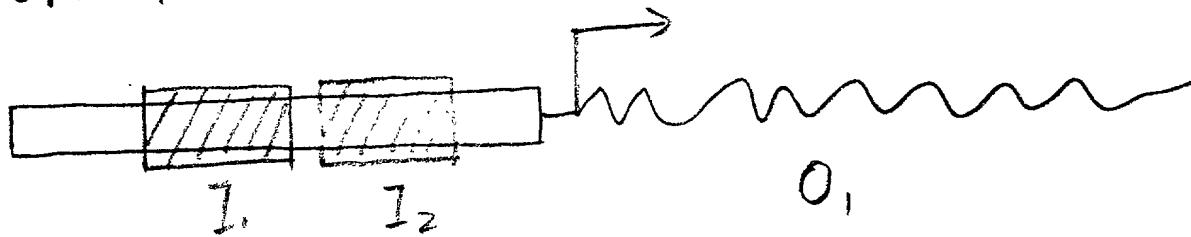
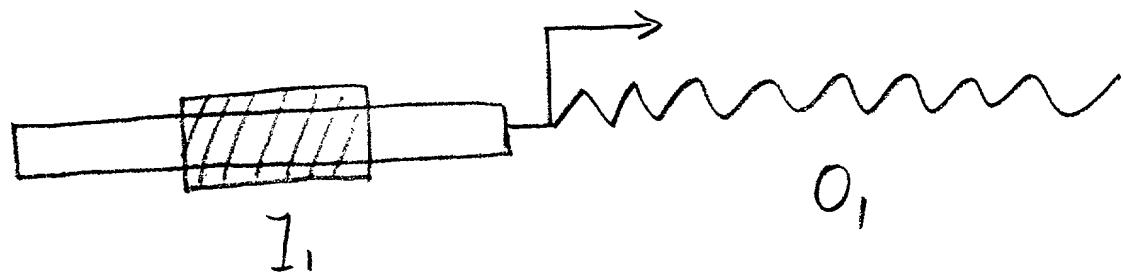


Figure 6

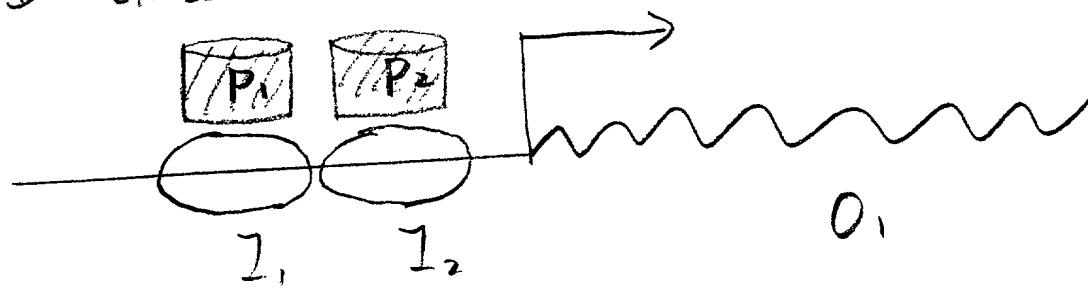
7A: NOR Gate:



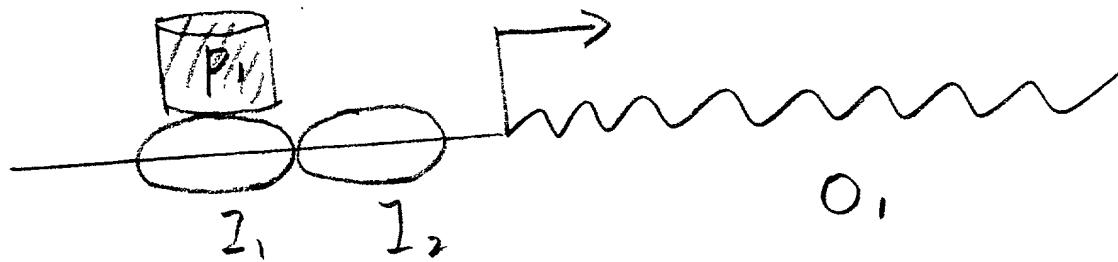
7B: NOT Gate:



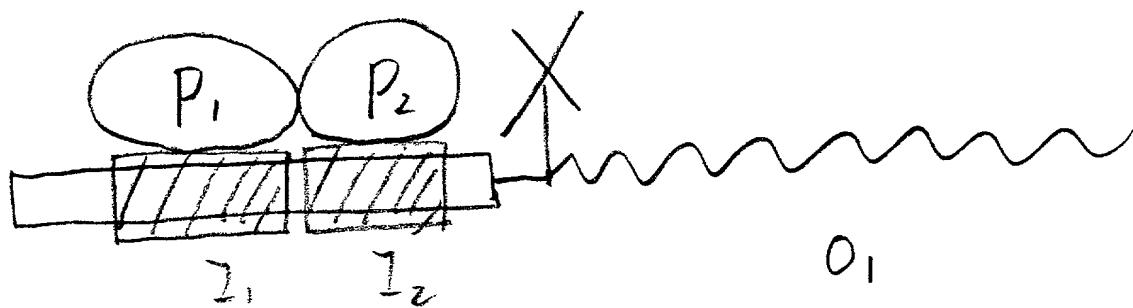
7C: AND Gate:



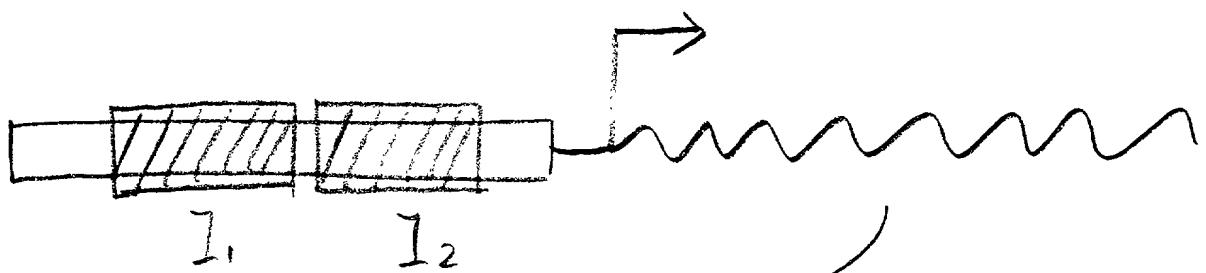
7D: OR Gate



7E: NAND Gate



## Gate A (NOR)



## Gate B (NOT)

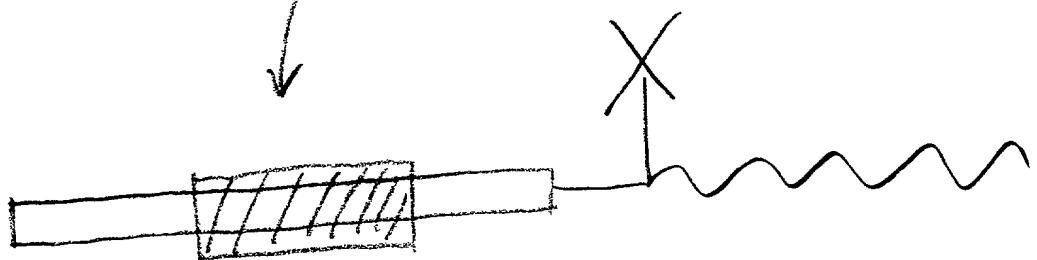


Figure 8

GATE A (NOT)

GATE B (NOT) RADIATION

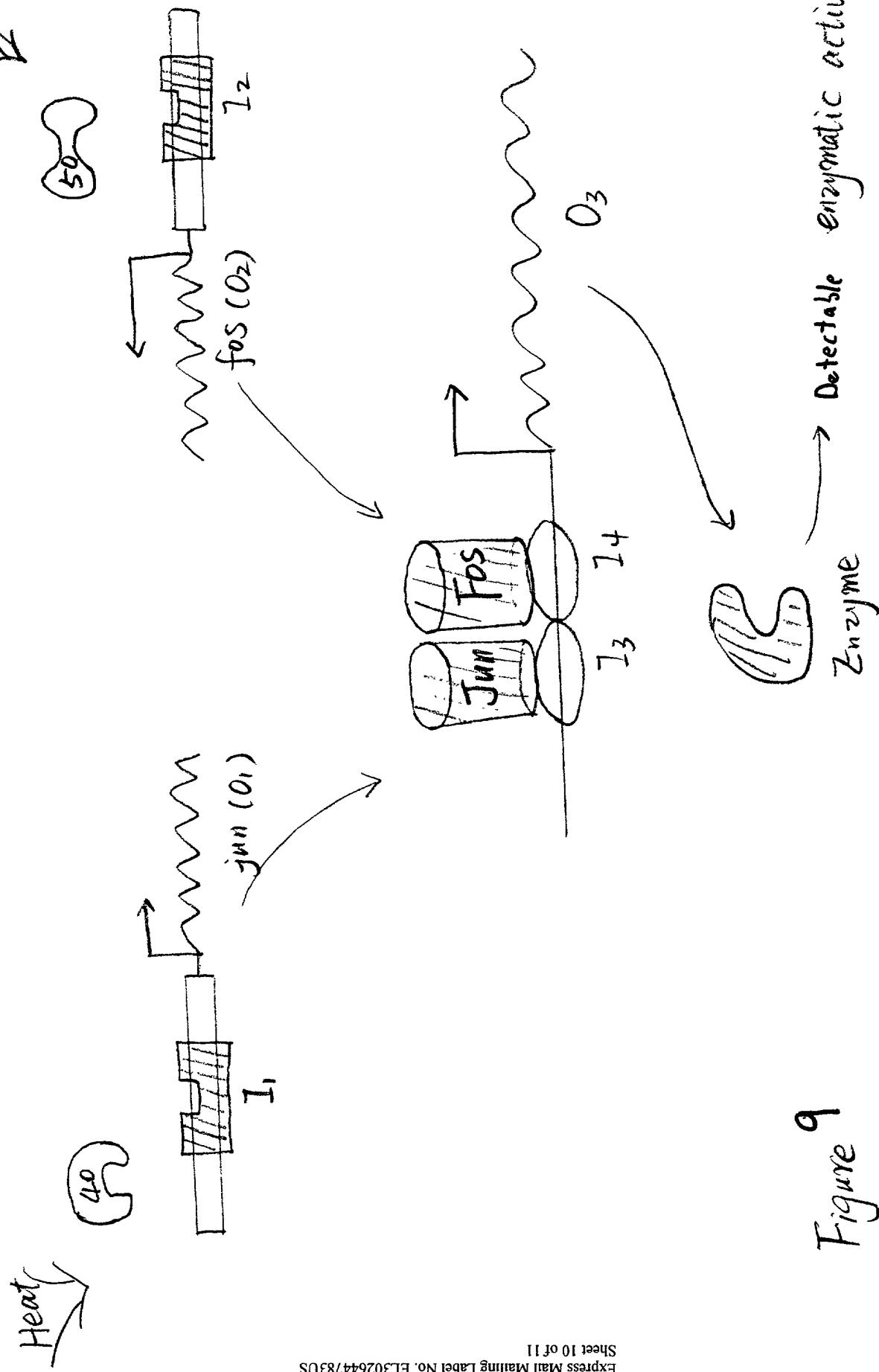


Figure 9

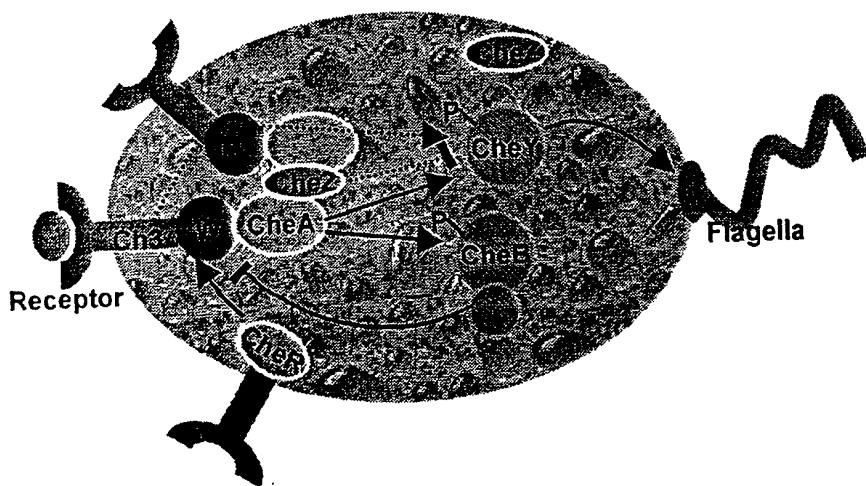


Figure 10